

ABSTRACT OF THE DISCLOSURE

The present invention comprises novel methods, compositions and kits that use N4 vRNAP deletion mutants to detect and quantify analytes comprising one or multiple target nucleic acid sequences, including target sequences that differ by as little as one nucleotide or non-nucleic acid analytes, by detecting a target sequence tag that is joined to an analyte-binding substance. The method consists of an annealing process, a DNA ligation process, an optional DNA polymerase extension process, a transcription process, and, optionally, a detection process